

PC-STOR Winchester Disk With Integrated Cartridge Backup

- Designed exclusively for today's Personal Computers
 - IBM Personal Computers
 - COMPAQ
 - Columbia Data Computers
 - Eagle Personal Computers
 - Texas Instruments Professional
- A high performance 34.0 Mb. capacity 5¼" industry standard ST-506 Winchester Hard Disk with the fastest available access times
- A high performance 16.5 Megabyte capacity 6400 BPI "Start-Stop" "File Oriented" Cartridge Tape Backup unit.
- Industrial grade power supply with automatic current limit and overload protection.
- Comprehensive menu-driven tape software package (TIP-SIX)
 - DOS 2.0 or CP/M-86 compatible
 - Archive Bit Support
 - Complete Subdirectory Backup Capability
 - Direct Tape Positioning Control
 - Built-in Help Menu

Now you can improve your Personal Computer's system performance and throughput with the new PC-STOR subsystem from Alloy Computer Products.

Combining the best of two worlds into a single compact and attractive package, PC-STOR features a truly powerful high-performance Winchester Hard Disk, and a versatile easy-to-use Cartridge Tape Backup unit.

As the newest member of the growing family of Alloy peripherals, the PC-STOR features state-of-the-art design and efficiency in Personal Computer peripheral packaging.

Whether your primary applications are word processing, database management, general business accounting, or a combination of all the above, PC-STOR is a Personal Computer multi-peripheral mass storage unit that meets and exceeds the most demanding specifications for data storage and retrieval in today's professional marketplace.



THE HIGH PERFORMANCE HARDWARE

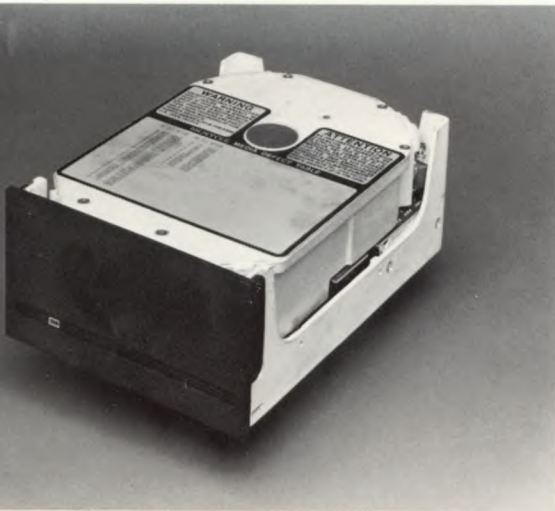
Winchester Disk

- Large Capacity
43.2 Mb. Unformatted
34.0 Mb. Formatted
- Second drive option to increase total storage to 68 Megabytes
- High Performance
- 38ms average access time
- Industry standard ST-506 Interface 5.0 Megabit/Sec Transfer Rate.

With 34.0 Megabytes of formatted data storage, the heart of the new PC-STOR subsystem is an ultra fast high-performance large capacity 5¼ inch Winchester Hard Disk drive.

A microprocessor-controlled rotary voice-coil head positioner on the hard disk coupled with an intelligent controller on the PC-BUS ensures the fastest possible access times with error-free operation in even the most I/O intensive operations.

The PC-STOR typically features access times that are 3 or 4 times faster than those of a comparable IBM-XT hard disk.



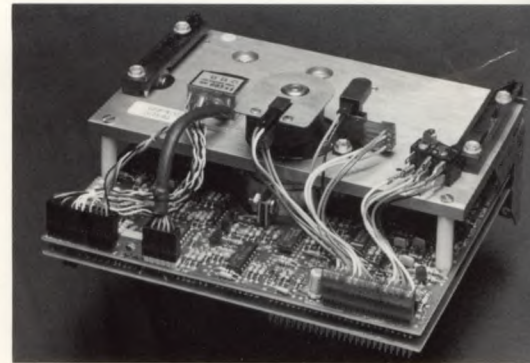
Cartridge Backup

- Utilizes ANSI standard 16.5 Megabyte cartridge tape
- Data transfer rates of 0.7 Megabytes/minute with over-lapped I/O
- Comprehensive menu driven file oriented tape support package (TIP-SIX), and Basic linker program

IN A PROFESSIONAL ENVIRONMENT TAPE BACK-UP IS NOT A LUXURY, IT IS A REQUIREMENT...

With 16.5 Megabytes of formatted data capacity per tape, system back-up and data retrieval is as easy as ever. A complete back up of the system can typically be accomplished on as little as two tapes compared to scores of 5¼" floppy disks.

This compact high-performance 6400 BPI 4-track serial tape drive with Read-after-Write data verification, guarantees absolute data integrity and reliability.



Whether your needs are domestic or international the PC-STOR is ready to travel, powered by a universally adaptable power supply for either 120 VAC or 240 VAC operation.

The entire PC-STOR subsystem and other Alloy Computer Products comply fully with U.L. and FCC requirements.

Cartridge tapes are available from Alloy.

48-Hour "Hot-Spare" Warranty Policy...

For a period of 90 days from the date of user purchase, Alloy will ship a replacement unit within 48 hours of notification. The user merely pays the shipping charges both ways. Warranty may be extended for a full year for an additional charge.

Our direct 'HOT LINE' number for customer support is (617) 875-0093.

ALLOY

Computer Products

THE PERFORMANCE COMPANY

THE HIGH PERFORMANCE SOFTWARE

TIP-SIX

Unlike other Cartridge Tape Subsystems on the market today, TIP is designed to operate with a high performance 'Start-Stop' cartridge tape drive. This allows TIP to perform 'File-Oriented' Backup/Restore operations to more effectively protect your data.

Utilizing 'File-Oriented' Backup/Restore, a user may perform operations on a single file on a single drive, or on all files on all drives with equal ease.

With over 10,000 copies of TIP distributed to date on a wide variety of Personal and Micro computers, TIP is now considered the de-facto industry standard format for 1/4" cartridge tapes.

The complete TIP-SIX package includes a main program, TIP, a comprehensive and very powerful menu driven stand-alone Backup/Restore utility. Additionally, the TIP-SIX package includes the assembly language tape control subroutines and a BASIC linker with a demonstration program.

TIP

TIP-SIX maintains file and data compatibility between Alloy's popular version-4 TIP and TIP-SIX via a command line option switch, allowing the user to freely transfer data files and programs between other micros and Personal Computers.

Executing TIP, the user will be prompted for one of the TIP commands listed below, and for the file name or names, the appropriate sub-directory and respective disk locations of the files that are to be Backed-Up or Restored.

Optionally, TIP may be directed to only Back-Up files that have the "Archive-Bit" set.

TIP COMMANDS:

- I — Initialize Tape
- B — Disk to Tape Backup + Init
- R — Tape to Disk Restoration
- A — Disk to Tape Append
- D — Tape Directory
- V — Tape File Verification
- T — Retension Tape

Also, TIP may be executed from a Batch file where TIP-SIX commands and file names are contained in a special TIP-SIX Batch file called 'xxx TIP'.



TUTIL

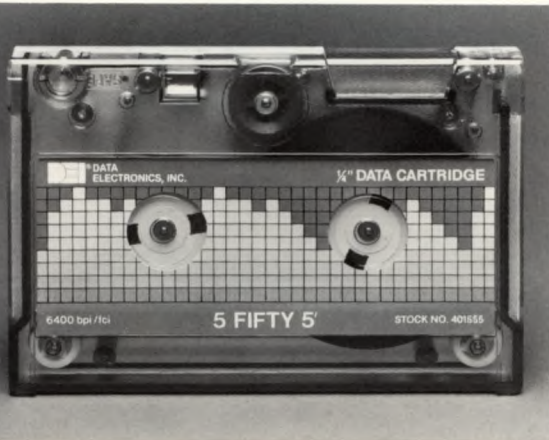
This file contains the primary assembly language subroutines that are used in TIP. These subroutines may easily be linked into other 'High Level Language' programs to create user-customized tape control programs.

TLINK

This is a tape control utility module designed to be linked into BASIC programs to allow the user to create simple yet powerful customized Cartridge Tape control programs.

TDEMO

This is a simple demonstration program that shows the use of the TLINK utility described above.



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FOR PERSONAL COMPUTERS

THE HIGH PERFORMANCE SPECIFICATIONS

PC-STOR Subsystem Specifications

HARD DISK UNIT:

Formatted Data Capacity	34.0 Megabytes
Data Transfer Rate	5.0 Megabits per second
Data Recording Mode	MFM
Recording Density	9400 Bits per inch
Track Density	960 Tracks per inch
Tracks per Surface	830
Rotational Speed	3600 RPM
Average Rotational Latency	8.3 milliseconds
Average Seek Time	30.0 milliseconds
Average Access Time	38.3 milliseconds

PC-STOR OVERALL:

Mean Time Between Failures	10,000 power on hours
Mean Time To Repair	30 minutes
Power Requirements	120 VAC @ 60 Hz. 240 VAC @ 50 Hz.
Power Consumption	maximum 3.5 amps @ 300 watts
Chassis Width	19.6"
Chassis Depth	18.0"
Chassis Height	5.4"
Loaded Chassis Weight	45 lbs.

CARTRIDGE TAPE UNIT:

Formatted Data Capacity	16.5 Megabytes
File Transfer Rate	0.7 Megabytes per minute
Data Recording Mode	4-Track Serial MFM
Data Recording Density	6400 BPI
Data Read/Write Speed	30 inches per second
File Search/Rewind Speed	90 inches per second
Tape Cartridge	ANSI Standard X.355-1977 (555)
Head Type	Dual Gap read while write with separate erase head

APPLICABLE DOCUMENTATION:

TIP-SIX USER MANUAL
PC-STOR INSTALLATION AND MAINTENANCE
MANUAL



OTHER PERSONAL COMPUTER PRODUCTS FROM ALLOY

PC-BACKUP — The PC-BACKUP is a stand-alone Cartridge Tape Backup unit for today's Personal Computers. It utilizes the same tape drive and software that is employed with PC-STOR.

PC-9 TRACK — This is an industry standard 1600 BPI 9-Track tape drive interface, that allows the user to Read or Write standard 10½" reel-to-reel IBM compatible 9-Track tapes.

PC-CARD — This is an enhancement to the IBM PC keyboard that allows the user to read the magnetic stripe on standard credit cards as either data or for Password protection in a secure environment. The output from the PC-CARD is made available to the application program as standard keyboard input.

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PC-BACKUP **Cartridge Tape** **Storage Unit for** **Personal Computers**

(continued)

With TIP-SIX, file and data compatibility between Alloy's TIP version-4 and TIP-SIX is maintained via an option switch, allowing the user to transfer data files and programs between other micro and personal computers already utilizing Alloy cartridge tape subsystems.

TIP-SIX

(Tape Interchange Package)

TIP is a comprehensive disk-to-tape backup package under either DOS 1.1/2.0 or CP/M-86 allowing single or multiple file save and restore commands. The TIP menu prompts the operator for the various commands to be executed, and the filenames to be stored or restored.

Optionally, TIP may be executed from batch file where TIP commands and filenames are specified in a "xx.TIP" file.

In addition to the main TIP program mentioned above, the distribution disk contains two utilities for use in various applications.

TUTIL. - This file contains the primary assembly language subroutines that are used in TIP. These subroutines may easily be linked into other 'High Level Language' programs to create user-customized tape control programs.

TLINK. - This is a tape control utility module designed to be linked into BASIC programs to allow the user to create simple, yet powerful, customized Cartridge Tape control programs.

48-Hour "Hot-Spare" Warranty Policy...

For a period of 90 days from the date of user purchase, Alloy will ship a replacement unit within 48 hours of notification. The user merely pays the shipping charges both ways. Warranty may be extended for to a full year for an additional charge.

Cartridge tapes are available from Alloy.

Specifications:

Chassis Width: 8.5"
Chassis Depth: 16"
Chassis Height: 5"
Net Weight: 18 lb.
Power Require: 120 VAC @ 60 Hz.
240 VAC @ 50 Hz.

Power
Consumption: Maximum 70 watts

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PC-BACKUP Cartridge Tape Storage Unit for Personal Computers

- Designed exclusively for today's Personal Computer
 - IBM Personal Computers
 - COMPAQ
 - Columbia Data Computers
 - Eagle Personal Computers
 - Texas Instruments Professional
- File-oriented hard disk back-up and restore
- Comprehensive menu-driven tape software package (TIP-SIX)
 - DOS 1.1/2.0 or CP/M-86 compatible
 - Archive Bit Support
 - Complete Subdirectory Backup Capability
 - Direct Tape Positioning Control
 - Built-in Help Menu
- High speed data transfer at .7 Mb/min.
- Up to 16.5 megabytes of data per 555' tape
- Media and Data Interchange with over 10,000 TIP Systems
- FCC Class B compliant

The PC-BACKUP Cartridge Tape subsystem provides low-cost, high-performance data storage/retrieval and Winchester Hard Disk back-up for Personal Computers.

The PC-BACKUP subsystem includes the following:

- IDS-PC tape controller
- 6400 BPI 1/4" 4-track cartridge tape drive
- Attractive table-top cabinet with integral power supply
- TIP-SIX software
- FCC-compliant data cables

The IDS-PC is an intelligent interface that utilizes a Z-80 microprocessor and proprietary firmware to provide a high-speed data link between a Personal Computer and the PC-BACKUP subsystem. The IDS-PC occupies a single slot in the PC Bus and is interfaced directly to the PC-BACKUP

hardware via a 37-pin shielded data cable.

The entire PC-BACKUP subsystem is FCC compliant and meets all Class B electromagnetic radiation specifications.

A 6400 BPI 4-track serial tape drive is employed in the PC-BACKUP subsystem. This compact, high-performance 1/4" tape drive accepts easy-to-handle, 4" x 6" ANSI standard 1/4" tape cartridges.

TIP-SIX is a vastly enhanced version of the popular Alloy version-4 TIP (Tape Interchange Program), customized exclusively for use on your Personal Computer. TIP-SIX allows the user to freely and conveniently transfer data to and from the cartridge tape. With over 10,000 copies of TIP distributed to date, TIP may now be considered the de-facto industry standard format for 1/4" cartridge tapes.



ITS-PC **9-Track Magnetic** **Tape Subsystem** **for the IBM®** **Personal Computer**

- Interfaces the IBM Personal Computer to a mainframe compatible 9-track tape drive
- Up to 42 megabytes of backup and working storage
- Ability to read tapes created on other computers and the ability to write tapes to be read on other computers
- High-speed disk-to-tape transfer at 1 Mb/min.
- Selective ASCII-to-EBCDIC conversion
- On board 16K buffer
- MS-DOS or CP/M-86 Compatible Software with BASICA links

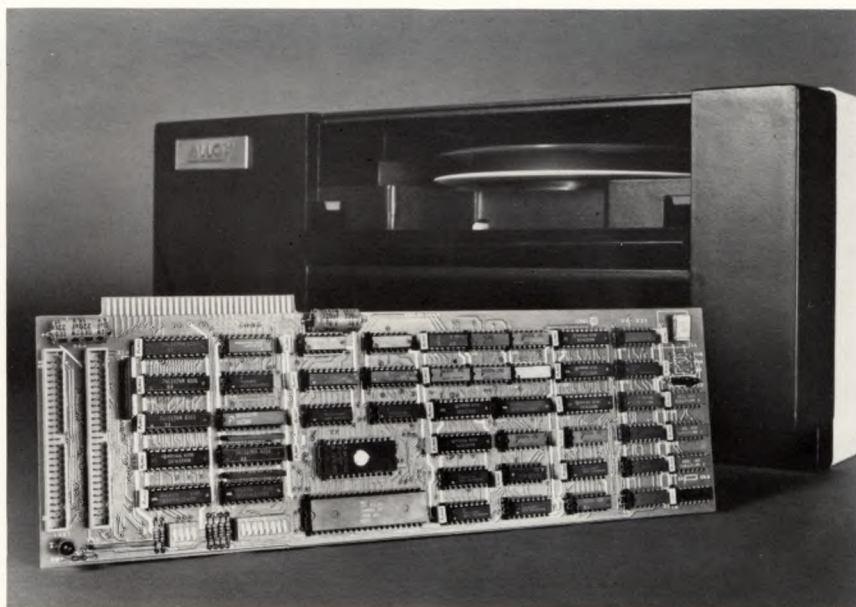
The ITS-PC is an intelligent interface that utilizes a Z-80B microprocessor and proprietary firmware to provide data transfer between an IBM Personal Computer, and an IBM mainframe-compatible 9-track tape drive with an embedded formatter. Included with the hardware is the ITS-PC software interface package, PC-TIP (Tape Interchange Program). Utilizing PC-TIP, the user may freely transfer data between the IBM Personal Computer and a 9-track tape drive.

The entire subsystem includes:

- ITS-PC hardware and installation guide
- PC-TIP software and users manual
- Cipher F-880 9-track tape drive with an attractive cover and necessary cables.

The ITS-PC occupies a single slot on the PC Bus, and is interfaced directly to the 9-track tape drive via two 50 conductor cables. PC-TIP is distributed on a single 5-1/4 inch DOS compatible floppy diskette.

The Alloy 9-track tape subsystem is both self-loading and self-threading for ease of use. In conjunction with the ITS-PC, it provides high-speed disk-to-tape transfer at rates of 1 megabyte per minute, with up to 42 megabytes of data storage per tape. The tape unit supports 1600 BPI tapes, with user-specified recording formats from 2 bytes to 16 kilobytes per block. The tape drive will accept all standard 9-track tape drive reel sizes up to 10-1/2 inches in diameter.



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ITS-PC 9-Track Magnetic Tape Subsystem for the IBM® Personal Computer

(continued)

PC-TIP (Tape Interchange Package)

Each ITS-PC subsystem includes a single density 5-1/4 inch diskette containing three comprehensive programs and two utilities that allow the user to read, write, or inspect a 9-track tape.

TREAD.CMD-A tape-to-disk-copy/conversion program which will read ANSI compatible data records from the 9-track tape and convert them to DOS compatible ASCII disk records, and store them on disk. This program allows for conversion of data records from EBCDIC to ASCII format, record segmentation of user's choice, and user-specified file name and disk selection.

TWRITE.CMD-The counterpart of TREAD, TWRITE is a disk-to-tape-copy/conversion program. TWRITE copies DOS compatible disk files to tape in ANSI compatible format. This program allows for ASCII to EBCDIC format, and a user-specified tape record structure.

TDUMP.CMD-This program allows the user to dump the contents of a 9-track tape to either the user's console, or to the system printer. This utility is extremely useful to determine the format in which a tape has been written.

TUTIL.A86-Tape control subroutines that are used in the three programs mentioned above. Utilizing these subroutines, the user can easily interact with the tape drive without having to write complex control routines. This utility is included in the PC-TIP software package to allow the user to develop his own customized tape control software.

TLINK.EXE-This utility module is supplied in .EXE format for insertion into BASIC programs. The .EXE format module may be linked into a BASIC program by the user to create simple, yet powerful customized tape control programs.

48-Hour "Hot-Spare" Warranty Policy...

For a period of 120 days from the date of purchase, Alloy will ship a replacement unit within 48 hours of notification. The user merely pays the freight cost for both the shipment of the new unit as well as the return of the defective unit. This "Hot-Spare" warranty may be extended to a full year for an additional charge.

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Alloy
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Magnetic Media for Micro's

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Printed in USA



Computer Products

A Division of Alloy Engineering Company, Inc.

RETAIL PRICE LIST

<u>SUBSYSTEM PRODUCT</u>	<u>SUGGESTED PRICE</u>
PC-STOR DISK & TAPE 41 MB unformatted SUBSYSTEM	\$5,295
PC-BACKUP	\$2,195
PC-CARD BANK CARD READER	\$ 395
PC-DISC 41 MB unformatted	\$3,495
S-100 & Z-80 CARTRIDGE TAPE SUBSYSTEMS	\$2,295
PC, S-100 & Z-80 9-TRACK MAGNETIC TAPE SUBSYSTEMS	\$6,595
RS-232 9-TRACK SUBSYSTEMS	\$7,795
 <u>ADDITIONAL CONTROLLER BOARDS</u>	
CARTRIDGE	\$ 795
9-TRACK	\$1,295
TRS-232	\$1,800
 <u>CARTRIDGE TAPES</u>	
DC-555XL/5 PACK	\$ 225

Effective: 11/16/83